

HEALTH AND SAFETY PLAN
CITY OF GLEN COVE

HEALTH AND SAFETY PLAN

CITY OF GLEN COVE GARVIES POINT ROAD RECONSTRUCTION PROJECT

OCTOBER 2014

Prepared for:

THE CITY OF GLEN COVE

Prepared by:

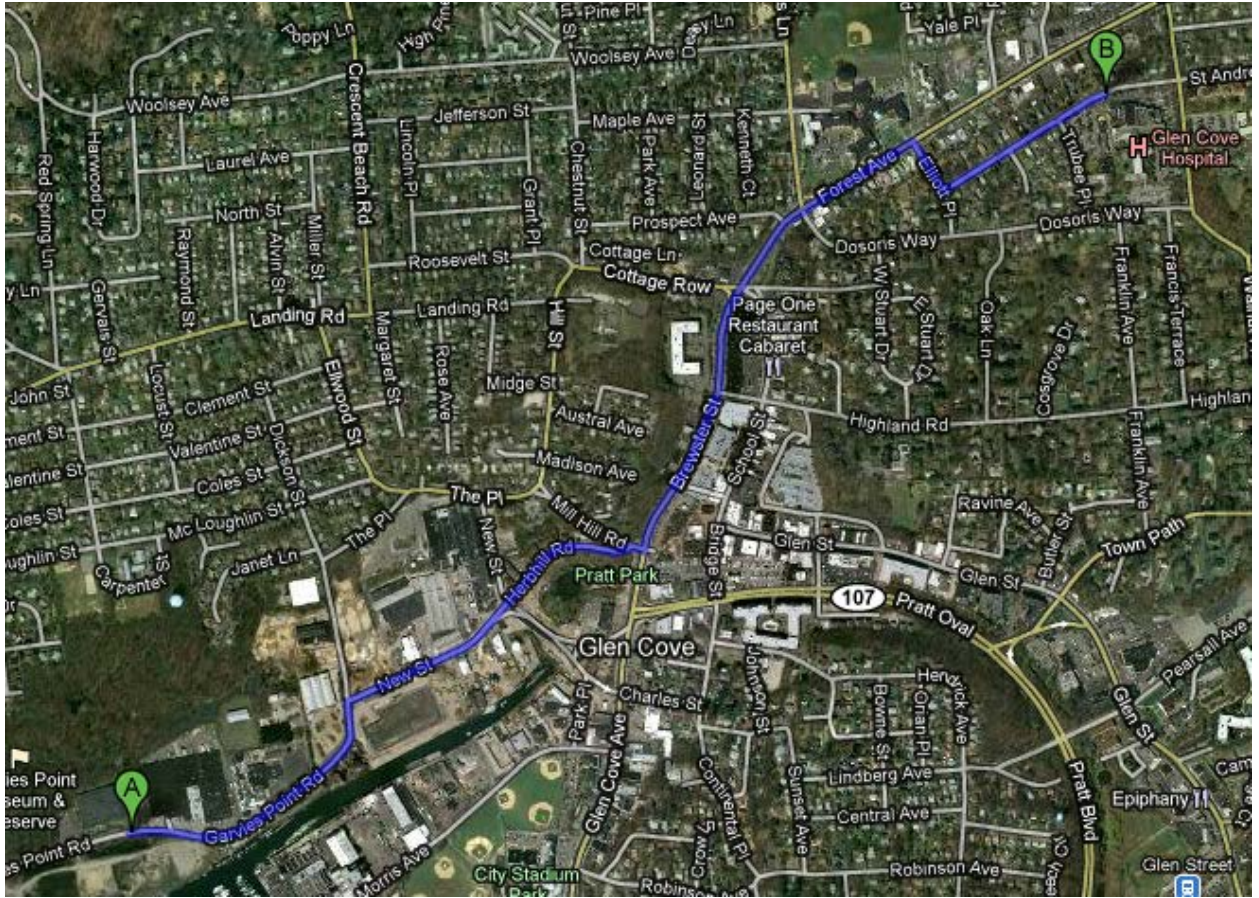
GANNETT FLEMING ENGINEERS, P.C.
WOODBURY, NEW YORK

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1.0 PROJECT HEALTH AND SAFETY POLICY

The maintenance of a safe and healthy work environment for Gannett Fleming employees is of utmost importance for the successful operation of our business. To this end, health and safety requirements must be considered fundamental to all aspects of the firm's operations.

To achieve our objectives, it is essential that our personnel be trained to follow procedures consistent with applicable safety standards. However, employees must be constantly alert to their personal obligation to comply with safe operating procedures. The continued cooperation of all our personnel is required to support and sustain an effective safety program.

Willful or consistent disregard of the safety provisions of this Health and Safety Plan (HASP) by a Gannett Fleming Engineers, P.C. (GF) employee will subject that employee to disciplinary action, up to and including discharge.

GF employees are required to follow the procedures specified in this HASP for applicable operations. If employees are required to engage in work activities that in their judgment would involve a threat to their personal safety, they shall immediately practice employee safety empowerment (Appendix G).

If employees are planning to engage in work activities that are not covered in this HASP, or if they are uncertain about the safety requirements for a specific work activity, they shall contact the GF Corporate Safety Manager and GF Project Manager before proceeding with the work. Also, if employees have any questions about the safety training requirements for their jobs or when and where to obtain safety training, they shall contact the GF Corporate Safety Manager. Any questions concerning safety procedures, safety equipment or safety training that cannot otherwise be resolved shall be referred to the Project Manager and Corporate Health and Safety Manager.

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2.0 SCOPE AND APPLICABILITY

This HASP is designed to provide safe procedures and practices for GF engaged in performing site reviews, investigations and inspections at the Herb Hill /Garvies Point Road right of way (ROW) in Glen Cove, New York. This HASP will also be made available to GF subcontractors and subconsultants as a safety reference. The requirements of Part 1910- General Industry Standards, Part 1926- Construction Standards of the Code of Federal Regulations, the New York State Department of Labor (NYDOL) regulations, and New York State Department of Transportation (NYSDOT) regulations apply to these activities. If there is a conflict, the provision more protective of employee safety and health shall apply.

The HASP is based on available information concerning possible hazards that exist, or may exist, at the project sites. If more information concerning the nature of possible health and physical hazards become available, the HASP will be modified accordingly. Modifications will be made by the GF Site Safety and Health Supervisor (SSHS) and approved by the GF Project Manager and GF Corporate Safety Manager. All modifications will be documented on a written memorandum by the SSHS. Additionally, a copy of this HASP shall be available for review by all personnel prior to their initial entry onto the site and be maintained on-site by the SSHS.

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3.0 KEY PERSONNEL AND RESPONSIBILITIES

This section establishes the authority and responsibility for site health and safety and lists key project personnel. Any changes in key site personnel must receive prior approval by the GF Project Manager and Health and Safety Manager. A listing of project contacts is included as Appendix D.

Key Personnel	Title
<i>Vincent Frisina, P.E.</i>	Project Manager
<i>Peter Papamichael</i>	Site Safety & Health Supervisor
<i>Caitlin Wunsch</i>	Field Personnel
<i>Scott Narod</i>	Field Personnel
<i>Paula Loht</i>	Corporate Safety Manager

3.1 GF Project Manager

- Verify that health and safety provisions as defined in this HASP are implemented at the project site.
- Advise the Site Safety and Health Supervisor (SSHS) of his/her safety, health and environmental responsibilities and hold them accountable for their assigned site activities.
- Approve all changes of key site personnel.
- Design and manage site operations to minimize environmental, safety, and human health impacts and provide workplaces that control recognized safety hazards.
- Review and evaluate site performance in safety, health, and environmental protection.
- Consult with the GF Health and Safety Manager and Corporate Safety Manager as required to resolve health and safety issues arising at the project site.

3.2 GF Site Safety & Health Supervisor

- Assume responsibility as GF Safety Representative to the Sidney B. Bowne, LLC and Glen Cove representatives.
- Designate professional staff to support site safety, health, and environmental control activities.
- Verify that personnel receive the necessary training for conducting an effective site health and safety program.

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- Approve all changes of key health and safety personnel.
- Overall responsibility for verifying that GF site activities are conducted in accordance with the provisions contained in this HASP.
- Provide oversight of health and safety issues that affect GF project activities at the site.
- Advise the Project Manager on health and safety issues that affect project activities at the site.
- Verify that Personal Protective Equipment (PPE), monitoring equipment, sanitation facilities, etc., is adequate to support an effective health and safety program at the site.
- Arrange for site personnel to be informed of potential health and safety hazards associated with their assigned tasks and verify that safe work practices and procedures are instituted, including the proper wearing of PPE.
- Direct site emergency response activities with respect to GF employees.
- Enforce health and safety provisions applicable to GF personnel at the project site as applicable.
- The primary site duty and responsibility is to implement and direct the health and safety program at the site in accordance with the provisions contained in this HASP.
- Verify that GF site activities are conducted in a safe manner.
- Authority to stop any operation that threatens the health or safety of GF site personnel or the surrounding populace or has the potential for a significant adverse impact to the environment.
- Be present on-site as required during site work activities.
- Maintain a Daily Safety Log summarizing daily GF health and safety activities, as applicable. The logbook shall include, as a minimum, the following information: instrument field calibration data (if applicable), air monitoring results (if applicable), weather conditions, names of personnel present at the site (including visitors), PPE utilized at site activities, any unusual events, accidents or breaches of procedure. The Daily Safety Log Book shall be turned over to the Project Manager at the conclusion of field activities for inclusion in the project files.
- Maintain Daily Air Monitoring Reports (if applicable) to include instrument utilized for air monitoring, instrument calibration data, air monitoring results from each work location prior to the initiation of each day's activities, periodically throughout the day and the end of each day's activities.
- Conduct initial site safety briefings and daily safety meetings for all GF site personnel when on site.

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- Modify the HASP as necessary as on-site activities and events change. All HASP modifications shall be presented in a written memorandum to the Project Manager and GF Health and Safety Manager.
- Consult with the GF Corporate Safety Manager to resolve site health and safety issues.

3.4 GF Corporate Safety Manager

- Provide employees with training, safety equipment and personal protective equipment as requested.
- Assist the Project Manager, Health & Safety Manager, and SSHS in identifying and minimizing safety and health hazards at the site.

3.5 Site Personnel

- Take reasonable precautions to prevent injury to themselves and to their fellow employees.
- Perform only those tasks that they believe they can do safely, and immediately report any accidents and/or unsafe conditions to the SSHS.
- Notify the SSHS of any special medical problems or medical restrictions and make certain that all on-site personnel are aware of any such problems.

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4.0 PROJECT BACKGROUND INFORMATION

The purpose of this site investigation is to collect sufficient subsurface data for the quantification and delineation of impacted subsurface soil and determine groundwater quality.

Activities will include the following:

- Advancing soil borings in locations in 42 boring locations along Herb Hill Road and Garvies Point Road;
- Collecting soil samples from boring locations;
- Collecting groundwater samples from select boring locations.

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5.0 HAZARD ASSESSMENT AND CONTROL

This section identifies potential physical and health hazards that may be encountered while performing site investigation tasks. Additionally, control measures are provided that will be implemented to reduce the risk associated with the identified hazards. If the nature of the project tasks change or additional hazards are identified, this section will be amended as appropriate.

5.1 Specific Task Descriptions

Specific Task Description/Task Specific Hazards

Specific Task Description	Task Specific Hazard	Hazard Level
Intrusive drilling and sampling activities	Dermal exposure, inhalation of fugitive dust	Low Hazard
Oversight of subcontractor	Slips, trips, falls, mechanical and motorized equipment	Low Hazard
Working within an active roadway	Slips, trips, falls, motor vehicle traffic	Moderate Hazard

5.2 Hazardous Materials

VOCs, Total and Dissolved Metals

Currently the project tasks will require GF employees to handle or work around potentially impacted materials that may contain volatile organic compounds (VOCs) including 1,1 – dichloroethene, tetrachloroethylene, cis-1,2-dichloroethylene, vinyl chloride; metals including antimony, arsenic, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, selenium, sodium, and zinc.

Radiation

Currently the project tasks will require GF employees to handle or work around potentially impacted radioactive materials that may contain Radium – 223, Radium – 224, Radium – 226, Radium – 228, and Thorium – 232.

The hazards associated with radioactive materials are related to the type of radiation emitted.

Alpha particles – travel distances in air are limited to no more than a few centimeters. Alpha particles are easily shielded against and can be stopped by a single sheet of paper. Alpha particles cannot penetrate the dead layer of the skin; therefore, they do not present a hazard to exposure external to the body. Alpha emitters can present a serious

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hazard when they are in close proximity to cells and tissues, such as the lungs. Special precautions must be taken to ensure that alpha emitters are not inhaled, ingested or injected.

Beta particles – interact less intensely with atoms in the materials they pass through, giving them a longer range than alpha particles. Thin layers of metal or plastic will shield beta particles. Beta emitters can pose a hazard if inhaled, ingested or absorbed in to the body. In addition, energetic beta emitters are capable of presenting an external radiation hazard, especially to the skin.

Gamma radiation – loses energy slowly and therefore gamma rays are able to travel significant distances. In the absence of appropriate shielding, gamma rays can travel tens or hundreds of meters in air. Gamma radiation is typically shielded using very dense materials such as lead or other dense metals. Gamma radiation can present a significant hazard from exposure external to the body.

Employee Safety Empowerment

In the event that previously unidentified hazardous materials or site contamination is encountered during the course of site activities, the work will cease and the GF SSSS will practice Employee Safety Empowerment and notify the GF Corporate Safety Manager and GF Project Manager who will in turn notify the Sidney B. Bowne, LLC and City of Glen Cove representatives.

Contaminants of Concern Table

The following table describes the contaminant, exposure risk, symptoms, first aid care, and the monitoring devices needed to protect from exposure during onsite activities.

Containment	Exposure Limit	Concentration	Media	Route of Exposure	Symptoms of Exposure	First Aid	Monitoring Device
Antimony	0.5 mg/m ³	Max: 310 mg/L	Groundwater	inhalation, ingestion, skin and/or eye contact	irritation eyes, skin, nose, throat, mouth; cough; dizziness; headache; nausea, vomiting, diarrhea; stomach cramps; insomnia; anorexia; unable to smell properly	Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately	Data RAM
Arsenic	0.010 mg/m ³	Max: 145 mg/kg (Soil) Max: 1,900 mg/L (Groundwater)	Soil, Groundwater	Inhalation, skin absorption, skin and/or eye contact, ingestion	Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, resp irritation, hyperpigmentation of skin, [potential occupational carcinogen]	Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately	Data RAM
1,1 - Dichloroethene	N/A	10 ug/L	Groundwater	Inhalation, skin	irritation eyes, skin, throat; dizziness, headache,	Eye: Irrigate	Mini RAE

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				absorption, ingestion, skin and/or eye contact	nausea, dyspnea (breathing difficulty); liver, kidney disturbance; pneumonitis; [potential occupational carcinogen]	immediately Skin: Soap flush immediately Breathing: Respiratory support Swallow: Medical attention immediately	
Tetrachloroethylene	100 ppm	Max: 38 ug/L	Groundwater	Inhalation Absorption Contact, Ingestion	Ulceration of nasal septum, dermal, GI disturbances, Respiratory irritation	Eye: Irrigate immediately Skin: Soap wash Breath: Respiratory Support Swallow: Medical attention	Mini RAE
Vinyl Chloride	1 ppm	Max: 16 ug/L	Groundwater	Inhalation, skin and/or eye contact (liquid)	lassitude (weakness, exhaustion); abdominal pain, gastrointestinal bleeding; enlarged liver; pallor or cyanosis of extremities; liquid: frostbite; [potential occupational carcinogen]	Eye: Frostbite Skin: Frostbite Breathing: Respiratory support	Mini RAE
Cis- 1,2 - Dichloroethene	200 ppm	Max: 5,100 ug/L	Groundwater	Inhalation, ingestion, skin and/or eye contact	irritation eyes, respiratory system; central nervous system depression	Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately	Mini RAE
Cadmium	0.005 mg/m ³	Max: 140 mg/L	Groundwater	Inhalation, Absorption, Contact, Ingestion	Allergic reactions, exzema or dehydration of the skin	Eye: Irrigate immediately Skin: Soap wash Breath: Respiratory Support Swallow: Medical attention	Data RAM
Chromium	1 mg/m ³	Max: 170 mg/L	Groundwater	Inhalation, Absorption, Contact, Ingestion	Irritate eyes, skin,cough, sneezing,redness in throat, coughs, ulceration of nasal septum	Eye: Irrigate immediately Skin: Soap wash Breath: Respiratory Support Swallow: Medical attention	Data RAM
Copper	1 mg/m ³	Max: 1,300 mg/L	Groundwater	inhalation, ingestion, skin and/or	irritation eyes, upper respiratory system; metal fume fever: chills, muscle	Eye: Irrigate immediately	Data RAM

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				eye contact	ache, nausea, fever, dry throat, cough, lassitude (weakness, exhaustion); metallic or sweet taste; discoloration skin, hair	Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately	
Iron	N/A	Max: 91,900 mg/L	Groundwater				Data RAM
Lead	0.050 mg/m ³	Max: 3,600 mg/L	Groundwater	inhalation, ingestion, skin and/or eye contact	lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation eyes; hypertension	Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately	Data RAM
Magnesium		Max: 70,900 mg/L	Groundwater				
Manganese		Max: 22,200 mg/L	Groundwater				
Mercury	0.01 mg/m ³	Max: 2.2 mg/L	Groundwater	Inhalation, Absorption, Contact, Ingestion	Irritate eyes, skin, cough, chest pain, tremor, head ache, fatigue, indecision, weak	Eye: Irrigate immediately Skin: Soap wash Breath: Respiratory Support Swallow: Medical attention	Data RAM
Nickel	1 mg/m ³	Max: 290 mg/L	Groundwater	inhalation, ingestion, skin and/or eye contact	sensitization dermatitis, allergic asthma, pneumonitis; [potential occupational carcinogen]	Skin: Water flush immediately Breathing: Respiratory support Swallow: Medical attention immediately	Data RAM
Selenium	0.2 mg/m ³	Max: 44 mg/L	Groundwater	inhalation, ingestion, skin and/or eye contact	irritation eyes, skin, nose, throat; visual disturbance; headache; chills, fever; dyspnea (breathing difficulty), bronchitis; metallic taste, garlic breath, gastrointestinal disturbance; dermatitis; eye, skin burns; in animals: anemia; liver necrosis, cirrhosis; kidney, spleen damage	Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately	Data RAM
Sodium	N/A	Max: 488,000 mg/L	Groundwater				Data RAM
Zinc	N/A		Groundwater				Data RAM

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		Max: 8,500 mg/L					
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Personal Protective Equipment (PPE) appropriate to the nature and condition of the material (as determined by the inspector) will be worn by field inspectors. Minimum PPE requirements for sampling include:

- Disposable nitrile gloves
- Disposable Tyvek coverall (optional)
- Reflective safety vest
- Safety shoes
- Hard hat

Hazardous materials brought on-site by GF or its subcontractors will be stored in the appropriate containers and labeled as to its contents and hazard potential in accordance with 29 CFR 1910.1200. Additionally, Material Safety Data Sheets (MSDS) will be maintained by the SSHS and reviewed with affected site personnel. Four copies of each MSDS will be sent to Bowne along with the anticipated quantities to be used, methods of use, storage methods and storage location prior to using the materials on-site.

Exposure Monitoring Plan

Dust Control

High winds and site operations can cause airborne dust hazards. If site operations generate sustained visible dust, a water mist will be applied to reduce dust generation.

Dust monitoring will be conducted with a Data RAM Dust Monitor in the immediate vicinity of the contaminant source point or work area (e.g., at the borehole and cuttings adjacent to the borehole). Action levels for Dust Control are established in **Table 1**.

GF personnel will conduct ambient air monitoring during drilling activities to evaluate dust levels. The spraying of soil with a light water mist may be required to prevent the spreading of dust and will be determined as field conditions necessitate, especially during the summer months. During activities which generate unacceptable levels of dust (per the contractor's HASP), soil wetting may be required.

VOCs

A Mini RAE photoionization detector (PID) with appropriate indicator tubes shall be utilized to periodically monitor the air in the workers breathing zone and around the boring locations when VOC readings exceed >5.0 parts per million (ppm). Action levels for VOCs are established in

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Table 2.

Monitoring shall be conducted before work starts each day, during excavation activities such as test pits and as deemed necessary by the SSO. In addition to VOC monitoring, the following will also be monitored following VOC monitoring protocol described in **Table 3**:

- Oxygen Content
- Lower Explosive Limit (LEL)
- Hydrogen Sulfide (H₂S)
- Carbon Monoxide (CO)

Radiation Screening

Radiation surveys will be performed every 1 foot when working around potentially contaminated soil and/or groundwater using a Ludlum TM Model 12 count-rate meter and scalar equipped with a 44-9 frisker probe (or equivalent, including appropriate probe capable of detecting alpha, beta, and gamma radiation).

- If soil or groundwater is found to have a radiation level >1 milli-REM per hour (mR/hr), then work will cease and all personnel will be moved 25 feet where field activities will be re-assessed.
- The general surrounding area of field activities will be screened at least once per hour. Work at the site shall cease if a reading of >1 mR/hr is measured.
- Action levels for radiation screening are established in **Table 4**.

If work is ceased, Employee Safety Empowerment will be practiced, the GF SSHS will notify the GF Corporate Safety Manager and GF Project Manager who will in turn notify the Sidney B. Bowne, LLC and City of Glen Cove representatives.

**Table 1
Dust Control Action Levels**

<u>Data RAM Dust Monitor Reading</u>	<u>Action</u>	<u>Personal Protective Equipment</u>
≤ 10.0 ppm	Point of Operations/General Work Area	Level D. Continue Performing Work and Continue Periodic Monitoring
>10.0 ppm	Apply water mist to reduce dust generation	Upgrade to Level C, Full Face Respirator, Tyvek Suit, Nitrile Gloves, Continue Continuous Air Monitoring
Sustained >10.0 ppm Reading	Stop work immediately.	Re-evaluate Work Zones.

**Table2
Volatile Organic Compound (VOC) Action Levels***

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<u>VOC's</u>	<u>Action</u>	<u>Duration</u>	<u>Personal Protective Equipment</u>
< 5.0 ppm	Continue Periodic Monitoring		Minimum: Level D PPE
>5.0 to <25.0 ppm	Continuous Monitoring	> 1 minute sustained	Minimum: Level D PPE
>25.0 ppm	Stop Work, Move Upwind While Vapors Dissipate.	> 1 minute sustained	Upgrade PPE to Level C: Full Face Respirator With Organic Vapor Cartridges

NOTE: * THESE LEVELS ARE PROVIDED FOR GENERAL GUIDANCE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR SSO OR COMPETENT PERSON TO DETERMINE APPROPRIATE ACTION LEVELS BASED ON SITE CONDITIONS, IDENTIFIED CONTAMINANTS, AND JOB TASKS.

Table 3
Oxygen, Lower Explosive Reading, Carbon Monoxide,
and Hydrogen Sulfide Action Levels*

<u>Reading</u>	<u>Action Required</u>
<u>Oxygen Content (%)</u>	<u>Action</u>
> 19.5 to < 23.5	Continue Performing Work
<19.5	Stop Work, Leave Area, Return After Level Rises to Above 19.5%
>23.5	Stop Work, Leave Area, Return After Level Drops to Below 23.5%
<u>Combustible Gases</u>	<u>Action</u>
0% LEL	Continue Performing Work
1-10% LEL	Continue Performing Work and Perform Continuous Monitoring
>10%LEL	Stop Work, Leave Area, Evaluate Source, Ventilate Work Area
<u>Carbon Monoxide</u>	<u>Action</u>
Background to 25 ppm	Continue Performing Work
>25 ppm	Stop Work, Leave Area, Return After Level Drops to Below 25 ppm
<u>Hydrogen Sulfide (H2S)</u>	<u>Action</u>
<10 ppm	Continue Performing Work, Continue Monitoring
>10 ppm	Stop Work, Leave Area, Return After Level Drops Below 10 ppm

Table 4
Action Levels for Radiation Screenings

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Parameter	Reading	Action
Radiation (alpha, beta, gamma)	<1 mR/hr	Continue operations, continue to screen area and samples
	>1 mR/hr	Stop your work. Practice Employee Safety Empowerment. Move all personnel 25 feet away from area. Initiate process.
Note: readings >5 mR/hr at a distance of 1 foot from the source requires posting and personnel monitoring appropriate for a radiation area.		

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5.3 Physical Hazards

The following physical hazards are anticipated during site investigation activities at each of the sites:

- Slips, trips and falls
- Eye hazards
- Heat stress/cold stress
- Severe weather
- Vehicular traffic
- Trenches and excavation
- Contaminant Exposure

5.3.1 Slips, Trips, and Falls

The potential for slips, trips and falls are posed by working on uneven and/or wet/icy walking/working surfaces. Site personnel should remain cognizant of uneven walking/working surfaces; wet snow or ice conditions, protruding and/or scattered debris or materials and stored equipment. Site personnel will be required to wear appropriate safety footwear for the facility conditions.

5.3.2 Eye Hazards

The potential for physical and chemical injury to the eyes is inherent with site investigation work. Therefore, site personnel are required to wear ANSI-approved safety glasses with side shields or safety goggles while performing site activities.

5.2.3 Heat Stress/Cold Stress

Heat stress may occur in summer activities, and the SSHS will institute a visual monitoring program when ambient temperatures exceed 70°F. The monitoring program will consist of the following:

- Encourage the routine intake of non-caffeinated fluids
- Monitor employees for visual signs of heat-related illness symptoms
- Establish work/rest regimes in accordance with ACGIH guidelines
- Establish a “buddy system” to ensure that employees are not working alone during activities that pose a potential heat stress concern

Cold stress may occur during winter site activities. The SSHS shall be cognizant of weather conditions and remind employees to dress appropriately with adequate insulating dry clothing to maintain core body temperatures above 96.8°F when air temperatures are below 40°F. The SSHS will visually monitor GF site workers for the symptoms of cold-related injuries. If continuous work is to be performed in the cold at air temperatures below 19.4°F, the SSHS will institute a work-warming regimen in accordance with the ACGIH guidelines.

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5.3.4 Severe Weather

Exterior work will not be permitted when severe weather conditions exist. Severe weather conditions include electrical storms, tornadoes, hurricanes, floods, high winds, heavy rain or snow that creates unsuitable walking/working surfaces, and excessive heat or cold indices.

5.3.5 Vehicular Traffic

The nature of the work to be performed by GF and subcontractor personnel may expose personnel to on site vehicular traffic. All personnel will be required to wear safety vests consisting of fluorescent orange, pink or green material with safety reflective material and hard hat when working on site. Additionally, traffic control shall be established in accordance with the GF's Safety Manual for Field Operations, Section II.F, Traffic Control Standards and Guidelines (See Appendix A) and the NYSDOT Manual of Uniform Traffic Control Devices to reduce the risk of site personnel being struck by traffic.

5.3.6 Trenches and Excavation

GF personnel are not permitted to enter or work near open trenches or excavations greater than 4 feet in depth. In the event that it becomes necessary for GF personnel to enter trenches or excavations greater than 4 feet in depth, the SSHS will evaluate the trench/excavation to ensure that proper protective systems (i.e., shoring, sloping, shielding) in accordance with 29 CFR 1926.652 are in place and atmospheric monitoring for oxygen, flammability and other potential hazard materials has been performed.

5.3.7 Confined Space Entry

Confined space entries by GF personnel are not anticipated during site activities and, therefore, GF personnel are not permitted to enter confined spaces. If entry into a confined space becomes necessary, the SSHS must modify this HASP and obtain approval from the GF Project Manager and Health and Safety Manager prior to entry. Upon authorization, the entry may proceed with appropriately trained personnel and under procedures in accordance with the GF, Inc. Standard Operating Procedure Number 10: Confined Space Entry Program (See Appendix A).

5.3.8 Contaminant Exposure

Potential Contaminant Exposure for GF personnel is discussed in Section 5.2 of this HASP. Exposure to such contamination may occur through inhalation, dermal contact, or ingestion. Sampling and testing of media for contaminants must be conducted in accordance with training, certification, and PPE requirements outlined in Section 5.2 of this HASP, and the medical requirements described in Section 7.0 of this HASP. Air monitoring activities are also discussed in Section 5.2 of this HASP.

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6.0 SAFETY AND HEALTH TRAINING

In accordance with 29 CFR 1910.1200, Hazard Communication, the SSHS will provide a daily initial site awareness briefing when on-site. The briefing will include a review of this HASP with particular attention to potential hazards, control measures, PPE use and limitations, and emergency response procedures. All personnel will be required to sign the Initial HASP Training Log (Appendix B).

The GF Health and Safety Manager and GF Project Manager will ensure that personnel involved in sampling of hazardous and potentially impacted materials have undergone OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) 40-hour training. All personnel involved in sampling will also have reviewed the GF, Inc. Standard Operating Procedure Number 1: Respiratory Protection Program (Appendix A).

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7.0 MEDICAL REQUIREMENTS

All GF and subcontractor personnel involved in the site inspections and investigations and who may be required to wear a respirator shall have a current medical certification in accordance with 29 CFR 1910.134(b)(10).

7.1 Medical Treatment For Site Accidents/Incidents

Prior to the start of work at the site, the SSHS shall identify the nearest medical facility emergency room, obtain the phone number and driving directions. Additionally, the SSHS will obtain other local emergency numbers such as the police, fire, and ambulance.

The SSHS shall be informed of any site-related injury, exposure and/or medical condition resulting from activity on the site. All employees are entitled to medical evaluation and treatment in the event of a site accident or incident. If requiring medical attention, injured employees will be evacuated to nearby hospitals. Hospital directions and route maps are provided in Appendix C.

7.2 Universal Precautions

Universal Precautions shall be followed on site to minimize the risk from blood-borne pathogens. The universal precautions consist of treating all human blood and certain human body fluids as if being infectious for HIV, HBV and other blood borne pathogens. Clothing and first-aid materials, visibly contaminated with blood, will be collected by the SSHS and placed into a biohazard bag. Individuals providing first aid should wear latex gloves. If providing CPR, a one-way valve CPR device should be used (these will be included in on-site first-aid kits).

Work areas visibly contaminated with blood or body fluids shall be cleaned up using a 1:10 dilution of household bleach.

7.3 First-Aid Kits

A first-aid kit shall be available, readily accessible and fully stocked at the site.

7.4 Accident/Incident Reports

An Accident/Incident Report (Appendix E) shall be completed by the SSHS following the provision of any first-aid treatment at the site or medical evaluation. A copy of the report shall be emailed to the Project Manager and IncidentReport@gfnet.com within 24 hours. The Project Manager and the Health and Safety Manager shall be notified by telephone as soon as possible after the event.

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8.0 GENERAL SITE SAFETY REQUIREMENTS

8.1 Safe Work Practices

The following safe work practices are to be incorporated into work activities at Garvies Point Road, Glen Cove, NY.

- The SSHS will be on-site as required during project activities.
- On-site personnel are required to wear hard hat, reflective vest and safety shoes during all project site activities.
- Medical monitoring, respiratory fit test, and training documentation information, as needed, will be kept on site by the SSHS.
- Ground Fault Interrupt (GFI) circuits shall be used for cord and plug equipment in areas where water may be encountered.
- No open flames, fires, or portable kerosene or propane space heaters are permitted on site or within project trailers.
- On-site personnel required to wear respiratory protection devices are not allowed to have facial hair that interferes with a satisfactory fit of the respirator-to-face seal.
- All site personnel must have a respiratory fit test certificate issued within the past six months prior to the use of respiratory protection.
- Adequate quantities of potable drinking water should be available.
- Hazardous Materials brought on site shall be labeled in accordance with 29 CFR 1910.1200 and stored in accordance with 29 CFR 1910.106.
- Compressed gas cylinders brought on-site shall be stored in a designated location, upright, with valve caps secured in place and in secure racks or chained securely to a wall.
- No firearms or knives (except utility knives required for work tasks) will be permitted on-site.

8.2 Housekeeping Requirements

In accordance with 29 CFR 1910.141 and 29 CFR 1926.25 work areas (as applicable) should be kept in a neat and orderly condition. Work areas should be kept dry and free of obstacles or protrusions.

8.3 Posting

In accordance with 29 CFR 1903.2, the OSHA poster, informing employees of the protection and obligations provided for in the OSHA Act, shall be available, as applicable.

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Emergency phone numbers and directions to the designated site hospitals (Appendix C) shall be maintained in this HASP document. Copies of this HASP will be available to site personnel and at least one copy will be on-site at all times during field activities.

8.4 Safety Data Sheets

Copies of SDS for all chemical materials brought on site (if any) shall be maintained on site by the SSHS.

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9.0 EMERGENCY RESPONSE

9.1 Emergency Contacts

The following organizations are to be contacted for the provision of emergency services:

Agency	Telephone
Police Department	(516) 676-1000 or 911
Fire Department	(516) 671-3437 or 911
North Shore University Hospital – Glen Cove 101 St. Andrews Lane Glen Cove, NY 11542	(516) 674-7300
Poison Control	(800) 222-1222
Project Manager Vincent Frisina	(516) 364-4140 ext. 1323 (516) 491-6541 (cell)
Corporate Safety Manager Paula Loht	717-763-7211, ext. 2846 717-884-5137 (cell)

9.2 Emergency Signal for Site Operations

Prior to start of work at a specific site, the SSHS shall designate an assembly location, preferably uphill and upwind of the work area.

Verbal communications between personnel shall be used to signal on-site GF personnel to safely discontinue work and immediately leave their location and meet at the pre-designated assembly location.

9.3 Emergency Standard Operating Procedures

The following standard operating procedures are to be implemented by on-site personnel in the event of an emergency. The SSHS shall be notified and shall conduct response actions. Upon notification of a personnel injury, the designated emergency signal shall be sounded. All personnel are to terminate their work activities. The SSHS, if necessary, shall notify the ambulance service and hospital emergency room of the situation. If the injury is minor, but requires medical attention, the SSHS shall transport the victim to the hospital by an on-site vehicle. The SSHS shall accompany the victim to the hospital and provide assistance in describing the circumstances of the accident to the attending physician.

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Upon notification of an equipment failure or accident, the SSHS shall determine the effect of the failure or accident on-site operations. If the failure or accident affects the safety of personnel or prevents completion of the scheduled operations, all work shall be stopped until the situation is evaluated and appropriate actions taken.

Upon notification of a natural disaster such as tornadoes, high winds, floods, thunderstorms or earthquakes, all work activities are to be terminated by the SSHS and all personnel are to evacuate the area.

Upon discovery of previously unidentified hazardous materials or contamination, the SSHS should evacuate the work area and contact the Project Manager.

9.4 Emergency Response Follow-Up Actions

Following activation of the Emergency Response Plan, the SSHS shall notify the Project Manager by telephone and the following individuals as appropriate: Insurance Manager, Safety Manager, and the Health and Safety Manager. The SSHS shall submit a written report documenting the incident within one working day.

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APPENDIX A

Gannett Fleming Corporate Safety Manual

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APPENDIX B

Initial HASP Training Log

INITIAL HASP TRAINING LOG

[illegible]

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APPENDIX C

Hospital Directions

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CITY OF GLEN COVE

HOSPITAL LOCATIONS AND DIRECTIONS

Hospital Location, Phone Numbers and Directions

Start

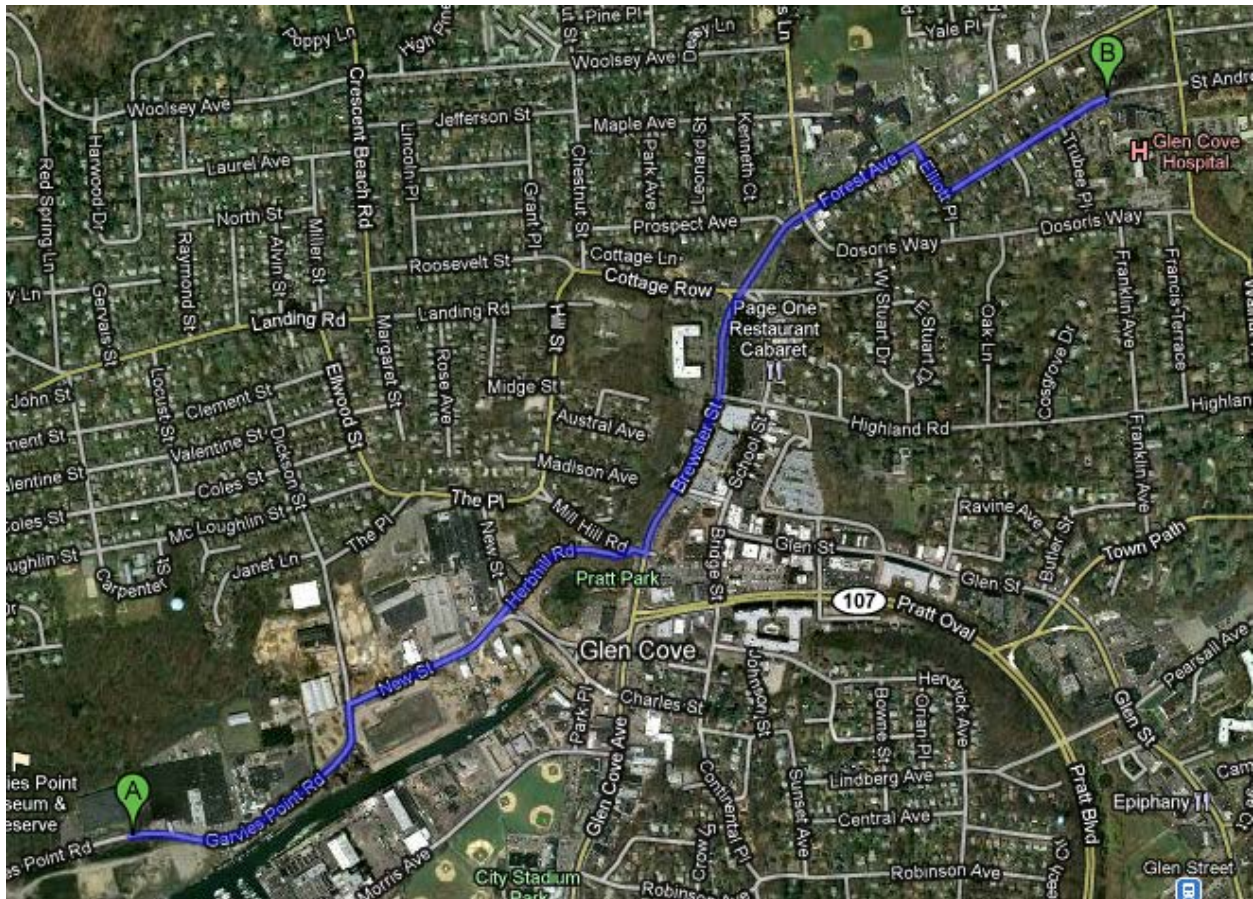
Garvies Point Road,
Glen Cove, NY

Directions to Hospital: (see map)

1. Head east on Garvies Point Rd toward Charles St/Herb Hill Rd/New St
2. Take the 1st right onto Charles St/Herb Hill Rd/New St
3. Turn left at Brewster St
4. Continue onto Forest Ave
5. Turn right at Elliott Pl
6. Take the 1st left onto St Andrews Ln
Destination is on the right.

Glen Cove Hospital
101 St Andrews Lane
Glen Cove, NY 11542
(516) 674-7300

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APPENDIX D

Project Contacts

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Project Manager Vincent Frisina	(516) 364-4140 ext. 1323 (516) 491-6541 (cell)
Corporate Safety Manager Paula Loht	717-763-7211, ext. 2846 717-884-5137 (cell)
Peter Papamichael	(917) 882-9063 (cell)
Caitlin Wunsch	(516) 983-4236
Scott Narod	(646) 961-8603

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APPENDIX E

Accident / Incident Report

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APPENDIX F

Employee Safety Empowerment

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